

ANNUAL GENERAL MEETING

29TH JANUARY, 1890.

PRESIDENT'S ADDRESS.

AT the close of 1889, the fifteenth year of our Society's existence, I have once more the honour of laying before you the annual report upon the progress and state of the Society, its gains and losses, and the work which it has achieved. In connection with the latter topic, I shall, as heretofore, make reference to such other contributions to the Natural History of Australia as I have been able to observe during the past year.

The first Monthly Meeting of the Society was held on 25th January, 1875, under the presidency of Mr. (now Sir William) Macleay,—who also, at the first Annual General Meeting, 31st January, 1876, delivered the first President's Address. In the meanwhile the "Chevert" expedition had been organised and equipped, and had completed its explorations in and about New Guinea. I have on a previous occasion made the remark that it was unquestionably to that expedition and its results that this Society owes its early and vigorous growth. Nevertheless the remark will bear repeating, as well as the reminder that the whole cost of that expedition was borne by our then President, a point which should not be forgotten in the enumeration of his services to Natural History, and his extraordinary contributions towards the welfare of the Linnean Society of New South Wales.

The number of original members was 125, many of whom there is reason to suppose subscribed not altogether on account of particular interest in any branch of Natural History, but rather in order to give a kindly help to an infant Society, whose objects everyone approved.

At any rate, there remain now, out of these 125, only 24 actual members of the Society, and it seems not unsuitable to our present time of assembling to record the names of the veterans:—

BRADLEY, H. H. BURTON.

BRAZIER, J., F.L.S.

COX, J. C., M.D., F.L.S., President Fisheries Commission.

DODDS, Hon. A., M.L.C.

ELDRED, W. H., Consul for Chili.

HAY, Hon. Sir J., K.C.M.G., &c., President, Legislative Council.

JENNINGS, Hon. Sir P. A., K.C.M.G., &c., M.L.C.

KING, Hon. P. G., M.L.C.

LIVERSIDGE, A., M.A., F.R.S., Professor of Chemistry, Sydney University.

LARK, F. B.

MACLAURIN, H. N., M.D., &c., Medical Adviser to the Government.

MACLEAY, The Hon. Sir WILLIAM, Kt., M.L.C.

MASTERS, G., Curator, Macleay Museum, Sydney University.

MACINTOSH, J. N.

MEREWETHER, E. C.

MAKINSON, H. M.

NORTON, Hon. J., M.L.C.

OSBORNE, G.

RAMSAY, E. P., LL.D., Curator, Australian Museum.

READ, R. B., M.R.C.S.

STEPHENS, W. J., M.A., F.G.S., Professor of Natural History, Sydney University.

WARD, W. D., M.A., M.D.

WILKINSON, C. S., F.G.S., Government Geologist.

WALKER, R. C., Principal Librarian, Free Public Library.

At the present moment the Society numbers one hundred and seventy-one members, five having withdrawn, by resignation or otherwise, and three new members having been elected since the last annual meeting.

But the Society has suffered a very severe loss in the death of one of its most distinguished members, eminent for his attainments, admirable for his union of patience and energy, and everywhere beloved for the unaffected simplicity, courtesy, and kindness which so remarkably characterised his intercourse with others. The Rev. JULIAN EDMUND TENISON-WOODS, who deceased in Sydney on Monday, the seventh of last October, became first attached to this Society upon his election by the Council to the status of a Corresponding Member, in June, 1876. He subsequently became, November, 1878, an ordinary member, and was elected President at the next annual meeting. After holding this office for the customary period of two years, he was elected Vice-President at the commencement of 1883, in which office he continued until the time of his death.

In the list of contributors to the First Series of our Proceedings (published by the Society, 1887), no less than seventy entries testify to the exuberant industry, no less than to the extraordinary variety of attainments, which characterised our lamented friend. They relate to so many different branches of Natural History that it would be impossible to classify them within the limits which the nature of my present duty prescribes.

I therefore simply enumerate them in the order of their appearance, as follows :—

P.L.S.N.S.W., 1st Series, Vol. I.: Observations on the genus *Risella*. Vol. II.: On some Australian sp. of *Trochocochlea*; On a new sp. of *Necera*; On a variety of *Trigonia Lamarckii*; On a Tertiary Formation at New Guinea; The Echini of Australia, including those of the "Chevert" Expedition, (pp. 31); On some Australian Shells described by Dr. A. Gould; Description of some new Marine Shells (Port Jackson Heads); On some

Tertiary Fossils from New Guinea ; On the Extra-tropical Corals of Australia ; On the Echini of Australia, supplemental note. VOL. III.: On an Australian variety of *Neritina pulligera*, Linn. ; On *Arachnopora*, new genus of Milleporidæ ; On *Psammoseris*, new species ; On *Desmophyllum*, new species, and young of *Cycloseris Sinensis* ; On some Australian Littorinidæ ; On *Bulimus Dufresnii* ; On three new genera (*Vasillum*, *Diechoræa*, *Phyllopora*) and one new species of Madreporaria ; On two new species Land Shells ; On *Euctimenaria*, new genus of Cheilosomatous Polyzoa ; On some Corals from Darnley Island ; On some new extra-tropical Corals ; On some Freshwater Shells from New Zealand ; On some Tertiary Fossils from Muddy Creek, Victoria. VOL. IV.: Continuation of last paper ; On some new Marine Shells ; On some Freshwater Shells from New Guinea ; On some new Marine Shells from Moreton Bay ; On *Araiya albens* ; On the relations of the Brisbane Flora ; On some new Australian Echini ; On *Heteropsammia Michelinii*, E. and H. ; On *Distichopora*, new species ; On *Euctimenaria ducalis* ; On some Fossils from Levuka, Viti ; On some Post-tertiary Fossils from New Caledonia. VOL. V.: On some of the littoral Marine Fauna of North-east Australia ; On a Fossiliferous Bed at the mouth of the Endeavour River ; On the habits of some Australian Echini ; Résumé of a report on the Fossil Radiata of New Zealand ; On *Flabellum*, new species ; On *Diaseris*, new species ; On a young *Temnopleurus*. VOL. VII.: Botanical notes on Queensland, No. 1 ; On *Stomopneustes*, new species, and a new variety of *Hippone variegata* ; On various deposits of Fossil Plants in Queensland ; Botanical notes on Queensland, No. 2 ; On *Allopora*, new species ; Botanical notes on Queensland, No. 3 ; Botanical notes on Queensland, No. 4 ; On a Coal Plant from Queensland ; Physical Structure and Geology of Australia, (pp. 18) ; On a Mesozoic *Mytilus* from the Barcoo ; Botanical notes on Queensland, No. 5 ; On a specimen of Coral from Port Jackson ; On *Brachiphyllum*, species from Mesozoic coal beds, Ipswich, Queensland. VOL. VIII.: On the Fossil Flora of the coal deposits of Australia, (pp. 130) ; On some Mesozoic Fossils from

Central Australia. VOL. IX. : Letter to Hon. W. MACLEAY, giving an account of travels in Perak; Report on the Geology and Physical Geography of the State of Perak, (pp. 28). 2nd Series, VOL. II. : A Statistical, Geographical, and Botanical Account of the Volcano of Taal, in the Island of Luzon, (pp. 125). VOL. III. : Fisheries of the Oriental Region, (pp. 90); Geographical Notes in Malaysia and Asia, (pp. 93); Malaysian Land and Freshwater Mollusca, (pp. 97). VOL. IV. : Essay on the Vegetation of Malaysia, (pp. 97). Also, in co-operation with Mr. F. M. BAILEY—VOL. IV. : A Census of the Flora of Brisbane. VOL. V. : On some of the Fungi of N.S.W. and Queensland. Also, the Presidential Addresses for the years 1880 and 1881.

In the *Proceedings of the Royal Society of Tasmania* the following papers appear :—(1874) Notes on the Physical and Zoological relations between Australia and Tasmania; (1875) On some new species of Tasmanian Marine Shells; On some Tertiary Fossils from Table Cape; On the genus *Fenestella*; On the Freshwater Shells of Tasmania; Description of new Tasmanian Shells; (1876) History of Australian Tertiary Geology; On some Tasmanian Patellidae; On a new genus of Nudibranchiata; On some new Tasmanian Marine Shells; On *Ampullaria*, n.sp.; Fossil Echinodermata; Notes on Ditto; (1877) Census with brief descriptions of the Marine Shells of Tasmania and the adjacent Islands; On Tasmanian Siphonaria, including a new species; On some new Tasmanian Marine Shells; (1878) On some new Tasmanian Marine Shells; On some Tasmanian Freshwater Univalves; (1879) On some Tasmanian Trochidae; Notes on *Bythinella*, &c.; (1880) On some introduced Plants of Australia and Tasmania.

In the *Proceedings of the Royal Society of New South Wales* we find :—VOL. X. : On some Tertiary Australian Polyzoa; VOL. XI. : On the Tertiary deposits of Australia; On some new Australian Polyzoa; The Palaeontological evidences of Australian Tertiary formations; On some Australian Tertiary Corals; VOL. XII; Tasmanian Forests, their Botany and Economic Value; The Molluscan Fauna of Tasmania; On some Australian Tertiary



Fossil Corals and Polyzoa ; VOL. XVI. : The Hawkesbury Sandstone ; On some Carboniferous Marine Fossils ; On some Mesozoic Fossils from the Palmer River, Queensland ; A fossil plant formation of Central Queensland ; VOL. XVII. : On the Waianamatta Shale ; VOL. XXII. : On the Desert Sandstone ; and, finally, On the Anatomy and Life History of Mollusca peculiar to Australia. This last paper obtained the Society's Medal and Prize offered for the best original work on the subject proposed. To Mr. Woods was also awarded the Clarke Medal of the same Society for the year 1888.

Transactions of the Philosophical Institute of Victoria.—VOL. II. : Observations on Metamorphic Rocks in S. Australia : VOL. III. : Remarks on a Tertiary Deposit in S. Australia ; VOL. IV : On some Tertiary Deposits at Portland Bay, Victoria.

Royal Society of Victoria.—VOL. VI. : On some Tertiary Fossils in S. Australia ; VOL. VIII. : On the Glacial Period in Victoria ; VOL. XIV. (1879) : On some new Marine Mollusca ; VOL. XVI. : On the genus *Amathia* of Lamouroux, with descriptions of new species ; List of Authors who have written directly or indirectly on Polyzoa ; VOL. XVII. : The Hodgkinson Gold Fields, Northern Queensland ; On some new Marine Mollusca.

Transactions of the Philosophical Institute of Adelaide.—(1865) The Tertiary Rocks of S. Australia.—Part 1. Introduction ; Part 2. The Mount Gambier Fossils ; Part 3. Brachiopoda ; (1866) The same continued.—Part 4. Fossil Echinidæ ; The Geology of the South-East ; (1878) On some Fossil Corals from Aldinga ; (1879) A List of Australian Star Fishes.

Royal Society of S. Australia.—1880) On some fossil and recent species of Australian Seleniariidæ ; On some New Corals from Australian Tertiaries.

Proceedings of the Queensland Philosophical Society.—VOL. III. (1881) : Geology of Northern Queensland.

Palaeontology of New Zealand.—PART IV. : Corals and Bryozoa of the Neozoic Period in New Zealand, 1880.

Journal of the Straits Branch of the Royal Asiatic Society.—No. 13. On the Stream Tin Deposits of Perak; No. 14. A journey to the Summit of Gunong Bubu.

Nature.—VOL. 31: Physical Geography of the Malayan Peninsula.—The Borneo Coal Fields; VOL. 33: The Geology of Malaysia, S. China, &c.

REPORTS, PAMPHLETS, &c.

North Australia; its Physical Geography and Natural History, pp. 46. Adelaide, 1864. Geology of Portland; Two Lectures, Portland, Victoria, 1865. Report on the Geology and Mineralogy of the S.E. district of S. Australia. Adelaide, 1866. Report on the Wilde River and Great Western Tin Mine. Brisbane, 1881. Lectures on the Burrum Coal Field, Queensland, with map. Maryborough. 1881. On the Natural History of N.S.W. Sydney, 1882. Coal Resources of Queensland. Brisbane, 1883. Report on the Geology and Mineralogy of the Northern Territory. Adelaide, 1887.

LETTERS TO NEWSPAPERS.

The Australasian.—(1866) Physical Geography of Australia, 6 letters; (1867) A trip to Wood's Point, 4 letters; (1879) A trip to a Coral Reef; (1880) A few words about Lichens; Australian Coral Reefs, 6 letters.

The Sydney Mail.—(1879) Wonders of Nature in Australia, 10 letters; (1880) Notes made in N. Australia, 12 letters; (1882) A visit to the Wilde River, 12 letters; (1883) Coal Plants of Australia, 12 letters.

South Australian Advertiser.—(1879-80) Northern Queensland, 12 letters.

Sydney Morning Herald.—(1880) Nature in the Far North, 18 letters; (1882) A day with the Myalls, 2 letters; (1884) Earthquake in Straits of Sunda, 3 letters; A journey through Java, 20 letters; An exploration in Perak, 7 letters; (1887) Explorations in N. Australia, 8 letters; A trip to the Victoria River, 2 letters; Notes of Travel, 7 letters; The Coal Trade between Australia and the East, 6 letters.

Bundaberg and Mount Perry Mail.--No. 477, 1881: The Carboniferous Rocks of the Lower Burnett.

Besides these contributions to the current literature of Natural History, I may mention the following important works:—Geological Observations in South Australia. 1 vol., London and Melbourne, 1862; History of the Discovery and Exploration of Australia. 2 vols., London, 1865; Fish and Fisheries of New South Wales. 1 vol., Sydney, 1882.

The following sketch of Mr. Woods's life and works is taken from a biographical notice which appeared in the *Adelaide Advertiser* of Oct. 8, 1889, and which is attributed to the pen of a very near relative who writes with special authority.

“The Rev. Mr. Woods was the son of Mr. JAMES DOMINICK Woods, of the Middle Temple and of Sydenham, Kent, who held a leading position on the literary staff of the *Times* for 40 years. His mother was HENRIETTA MARIA ST. ELOY, the daughter of the Rev. JOSEPH TENISON, of Donoughmore Glebe, in the County of Wicklow, Ireland. His maternal grandfather was the Bishop of Ossory, who was the nephew of the Most Rev. THOMAS TENISON, Archbishop of Canterbury. Mr. Woods was born at West Square, London, on November 15, 1832.” When his school education was completed he became associated with the Rev. CANON OAKLEY of Islington, whom he assisted in establishing the Catholic Schools of that suburb. After a temporary attachment to the Order of Passionists, he proceeded to France, when he became one of the Professors at the College for Naval Cadets at Toulon. Here his taste for geology and natural science received its first development.

Returning to England in about four years, he made the acquaintance of Dr. WILLSON, Roman Catholic Bishop of Tasmania, with whom in 1855 he went to that colony to establish a system of schools for the education of Roman Catholic children.

From Tasmania he removed to South Australia, where he was ordained in 1857, and where he remained for some years, engaged both in mission work, and in the organisation of the Roman

Catholic Schools of that colony. He afterwards became a missionary priest in New South Wales, with Sydney as his head quarters. In 1883, on the invitation of Sir F. A. WELD, K.C.M.G., Governor of the Straits Settlements, he proceeded to Singapore in order to explore Malacca and furnish the Government with some reliable information as to its geology and mineral resources. On his way thither he stayed for a time in Java, and was witness to one part of the eruptive outbreak at Krakatoa. He ascended two of the volcanoes while they were in eruption, and his experiences, as detailed in a private letter, were such as to determine him not to try the experiment again. His description of the scenes he encountered whilst passing through the Straits of Sunda was shocking. The sea was literally covered with corpses. However, it did not discourage him from adventures in other parts of the East, not less hazardous than the ascent of active volcanoes. Mr. Woods traversed the island of Java from end to end, and performed the same arduous task through Siam and Malacca, in each of which places he enriched the scientific literature of the world with his observations on the geology and botany of the regions he passed through. Sir FREDERICK WELD, shortly after Mr. Wood's arrival in Singapore, left the colony on leave, but before his departure he furnished Mr. Woods with credentials to the native princes, who assisted him in every way they could. Before he left Singapore the Colonial Secretary of that colony advised the British Government of the arrival of the Rev. Mr. Woods, and urged the desirableness of engaging his services to report to the Admiralty upon the coal resources of the eastern seas. The Admiralty accordingly detached from the naval squadron in the China Seas the Corvette "H.M. Pegasus," Captain BICKFORD, to enable Mr. Woods to make the necessary investigations. He thus visited and explored many parts of Borneo, Siam, Malacca, the Philippine Islands and other places. His reports to the Admiralty have not been made public, but their value was recognized in the munificent way in which Mr. Woods was rewarded for his investigations and descriptions. In a private letter from one of the principal naval officers on the

Chinese Station the remark was made that Mr. Woods' discoveries as to the coal resources of the East had increased the strength of the British Navy in that part of the world by a force better than half-a-dozen good-sized frigates. After a lengthened cruise Mr. Woods arrived at Hong Kong, where he was most cordially welcomed and entertained by Sir G. BOWEN and the Admiral of the station. Then he went to ascend the Hoang Ho, but was compelled by the state of his health to return. He came back to Australia in "H.M.S. Flying Fish," which landed him at Port Darwin. Here Mr. J. L. PARSONS, the Government Resident on the Northern Territory, engaged his services to visit and report upon the mineral districts of that portion of the country. After a short visit to Queensland he returned to Sydney after an absence of about four years.

Now, however, the continued hardships which he had undergone began to tell upon him, and his health slowly but surely gave way. "For nearly two years he was confined to his house, and latterly he was so debilitated that he was unable to see any but his immediate attendants. He suffered greatly, but he bore his afflictions with remarkable fortitude, and he accepted his fate with resignation. His departure from life was soothed by all the ministrations of that religion to which he had devoted his life, and he left the world in which his career had not been barren of results with no regrets such as might disturb a mind less evenly balanced and of religious convictions less assured than his own."

He had here many kind and considerate friends (among whom you will readily understand that Sir WILLIAM MACLEAY held a prominent place), but he had been exposed to troubles of which he made no complaint, but which seemed to have made a lasting impression on his naturally sanguine and happy temperament. On this head I quote a few sentences selected from a brief but affectionate memoir of the departed, which appeared in the *Centennial Magazine*, Sydney, January 1, and was written by his friend and our fellow member, the Rev. J. MILNE CURRAN, now of Bathurst:—"Of his personal character the public knew little.

He was a most genial companion and a sympathetic friend. There was a certain vein of sadness in his manner. The deep lines of care that furrowed and seamed his face were noticeable to many who knew nothing of his inner life. Even though in latter years tedious work was for him a stern necessity, he never lost that genial affability that charmed his friends. A glance through his correspondence shows that he had to bear trials that well-nigh embittered many years of his life. His sensitive nature never rallied from the hardships that induced him to leave Adelaide. He was forced to learn, too, that after doing his all, in giving the best years of his life to the service of Religion, he had to face actual need, or appeal to the charity of his friends. While his name was spoken of with honour and his work pointed to with pride by his co-religionists, he was himself on the very verge of want." Again, "shortly before his death he was given to understand that he should comply with an exceptionally exacting Church regulation—'It is very hard, very hard,' I heard him say, 'but I hope to practise a little of what I have been teaching.'"—*Requiescit in pace.*

I have drawn up a list of the Learned Societies, Institutions, Government Departments and Journals with which this Society is in correspondence, and to all of which our Proceedings are regularly forwarded.

The consequent Exchanges and Donations which we have received during the year are entered in each case. But for the sake of simplicity the words *Volume*, *Tome*, *Band* and the like are omitted before the Roman numerals, and the words *Part*, *Number*, *Heft*, *Fasciculus*, &c., are in like manner left out before the Arabic numerals.

AUSTRALIA.

Sydney—Australian Museum.

Mem. 2nd.—Rept. Lord Howe Island.

Trustees' Rept. (1888).

Lendenfeld, Monograph on Horny Sponges.

Sydney—Australian Museum.

- Ramsay, Birds of N.S.W.
- Comm. Technolog. Mus. Useful Plants, J. H. Maiden.
- Comm. Technolog. Mus. Rept. (1888).
- „ Free Public Library.
- „ Reports (1888) (1889).
- „ Parliamentary Library.
- „ Royal Society of New South Wales.
- „ Proc. XXII. 2. XXIII. 1.
- „ Lib. Catalogue.
- „ University Library.
- „ Calendar Univ. Sydn. (1889).
- „ Department of Mines.
- „ Memoirs of Geol. Surv. N.S.W.—Palaeontology,
- „ 2.—Tertiary Fl. Austral. v. Ettingshausen.
- „ Melbourne Exhibition (1888), Descr. Cat. N.S.W.
- „ Mineral Court.

[*Note.*—The Government of N.S.W. also purchase, at the rate of £1 per vol., 100 copies per annum of the Proceedings for public distribution.]

Melbourne—Field Naturalists' Club of Victoria.

- Vict. Naturalist V. 9, to VI. 5, and 9th Ann.
- „ Rept. F.N.C. V.
- „ University Library.
- „ Royal Society of Victoria.
- „ Proc. (New Series) I. (1889).
- „ Public Library.
- „ M'Coy, Prodromus of Zoology of Vict., XVII., to XIX.
- „ Repts. &c. (1887-88).
- „ Zoological and Acclimatization Society of Victoria.
- „ Department of Mines and Water Supply.
- „ Mines Reports, Jan.-Dec. (1888). Ann. Rept. (1888).

Melbourne—Field Naturalists' Club of Victoria.

- „ Roy. Comm. Sanitary Cond. Melb. Repts. (1889).
- „ Mineral Statistics Vict. (1888).

Adelaide.—Botanic Garden.

- Rept. (1888).
- „ Parliamentary Library.
- „ Royal Society of South Australia.
- Trans. XI. XII.
- „ Public Library.
- Rept. (1888).

Brisbane—Parliamentary Library.

- „ Queensland Museum.
- Rept. (1888).
- „ Royal Society of Queensland.
- Proc. V. 4 ; VI. 1, 2, 3, 4, 5.
- Rept. Ann. Mtg. (1889).

Townsville—Geological Survey.

- The Mineral Wealth of Qld. R. L. Jack,
Govt. Geologist.
- Rept. on Geol. of Russel R. ditto.
- Rept. on Coal on Flinders R. ditto.
- Second Rept. on Mt. Morgan, ditto.
- Rept. Limestone Distr. Palmer R. ditto.
- Rept. Tarangamba G. M. ditto.
- Dept. Agriculture.—Rept. on Insect and Fungus
Pests. 1.

Perth—Parliamentary Library.

TASMANIA.

Hobart.—Royal Society of Tasmania.

- Abstr. Proc. Nov. 13 (1888) to Oct. (1889) ; Proc.
(1888) ; Rept. (1888) ; Pres. Address (1889).

- „ Parliamentary Library.

- Geol. Tasm. R. M. Johnston. From the Premier
of Tasmania.

NEW ZEALAND.

Auckland—Museum.

Rept. (1888-89).

Christchurch—Museum.

Otago—Museum.

Wellington—Colonial Museum.

Transactions N.Z. Inst. XX.-XXI. (1888).

BRITISH ISLANDS.

Cambridge—Philosophical Society.

Proc. VI. 4-6 ; Trans. XIV. 3 (1889).

Leeds—Conchological Society of Great Britain and Ireland.

Journ. V. 12 to VI. 3 (1889).

London—British Museum.

,, British Museum (Natural History), South Kensington.

B.M.C. Birds, XIV. ; Foss. Rept. etc. 1-2; Marsup. ;

Foss. Cephalop. 1 ; Foss. Fish 1 ; Chelonians.

,, Entomological Society, Chandos St.

Trans. 1888, pt. 3, to 1889, pt. 3.

,, Geological Society, Burlington House.

Quarterly Journal, XLIV. 4, to XLV. 4 (1889).

,, Linnean Society.

Journ. Bot. XXIII. 156, 157, XXIV. 163, 164,

XXV. 165-170, XXVI. 173 ; Zool. XX. 119-121,

XXI. 132, XXII. 140 ; Gen. Ind. &c.

,, Zoological Society.

Proc. (1888) pt. 3 to (1889) pt. 2.

Abstr. Nov. 20 (1888) to Nov. 5 (1889).

,, Royal Microscopical Society.

Journal (1888) pt. 6 to (1889) pt. 5.

,, Royal Society.

Proc. XLIII. XLIV. XLV. 276 (1889).

Oxford—University Museum.

Cat. Adds. Radcl. Lib. (1888) 2 pts.

SCOTLAND.

Edinburgh—Royal Society.

Trans. XXVII, to XXX. 1 (1872-81); Proc.
103 to 109 (1872-81).

,, University Museum.

,, Royal Physical Society.
Proc. IX. 3 (1888).

IRELAND.

Dublin—University Museum.

,, Royal Dublin Society.

Trans. Ser. 2, I. 1-25, II. 3 pts. III. 1-10, IV. 2-5;
Proc. I. 3 pts. II. 7 pts. III. 7 pts. IV. 9 pts. V.
1-2, VI. 1-6 (1889).

CANADA.

Montreal—Montreal Society of Natural History.

Record, I. 1-2, III. 4-7 (1889).

,, Royal Society of Canada.

Proc. and. Trans. III.-VI. (1885-88).

Ottawa—Geological and Natural History Survey, Sussex Street,
Ottawa.

Palaeont. Canada, I. 2.

Toronto—The Canadian Institute.

Proc. Ser. 3, VI. 1 (1888).

INDIA.

Bombay—Bombay Natural History Society.

Journ. III. 4, to IV. 2 (1889).

Calcutta—Asiatic Society of Bengal.

Proc. (1889) 1-10, Journ. lvi. II. 2-5, lvii. II. 4
(1888), lviii. I. 1, II. 1, 2.,, Geological Survey of India, Indian Museum.
Bibliography. Records XXI. 4, to XXII. 3 (1889).

UNITED STATES OF NORTH AMERICA.

Boston—Boston Society of Natural History.

Proc. XXIII. 3, 4 (1888).

Boston—American Academy of Arts and Sciences.

Proc. n.s. XV. 1.

Cambridge, Mass.—Museum of Comparative Zoology at Harvard College.

Bull. XVI. 2, to XVII. 4 (1889), Rept. (1888).

Cincinnati—Society of Natural History.

Journ. IV. V. 1, VIII. 3, XI. 1-4 (1889).

New York—American Museum of Natural History.

Ann. Rept. (1888). Bull. II. 3. Rept. Central Park Menagerie (1888).

“ New York Academy of Sciences.

Ann. IV. 5-8, Trans. VII. 3-8 (1888).

“ The Editor of “Journal of Comparative Medicine and Surgery,” Botanic Gardens.

Journ. X. 1-4 (1889).

“ American Geographical Society.

Bull. XX. 4, and Suppt., to XXI. 3 (1889).

Philadelphia—Academy of Natural Sciences.

Proc. (1888) 2, 3.

“ The Editor of “American Naturalist.”

A.M., XXII. 262 to XXIII. 272. (Except 266 and 270 *not received*).

“ American Philosophical Society.

Proc. XV. 128 (1888).

“ Wagner Free Institute of Science.

San Francisco—Californian Academy of Natural Sciences.

Washington—Smithsonian Institution.

“ United States National Museum.

Proc. I.-IX. X. 46-49, XI. 1-42; Bull. 4, 7. 8, 11, 13-24, 27-31; International Exh. (1876) Animal Resources, U.S.

“ United States Geological Survey.

Bull. 40-47 (1888); Geol. Leadville; Min. Resources, U.S. (1887).

Washington—Bureau of Ethnology, Ann. Repts. II.-IV.

“ Department of Agriculture.

Baltimore—Johns Hopkins University.

Circulars VI. 65 and 67, VIII. 68 and 74 (1889);
Studies Biol. Lab. IV. 3, 4 (1888).

Granville, Ohio—Denison University.

Bull. IV. (1888).

New Haven—Connecticut Academy of Arts and Sciences.

Salem, Mass.—Essex Institute.

Bull. XIX. (1887).

FRANCE.

Cherbourg—Société Nationale des Sciences exactes et naturelles
et Mathématiques de Cherbourg.

Paris—Académie des Sciences de l'Institut de France.

Ctes. Rend. CVIII.-CIX. 13 (1889).

“ Feuille des Jeunes Naturalistes.

219-229 (Nov. 1889); Cat. Bibl. 4-6.

“ Jardin des Plantes.

“ Société Entomologique de France.

“ Société Zoologique de France.

Bull. XIII. 8, to XIV. 6 (1889) (except XIII, 9 and
xiv, 3, *not received*); Mém. I, 3 (1888).

“ The Director of the “Journal de Conchyliologie.”

Marseilles—Musée d'Histoire Naturelle de Marseille.

Ann. Zool. II. (1885).

Caen—Société Linnéenne de Normandie.

BELGIUM.

Antwerp—Société Royale de Géographie d'Anvers.

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The Library of the Society has been further enlarged by many donations, amounting in all to over 900 volumes. Of these over 700 have been presented by SIR WILLIAM MACLEAY and include many serial and other works of great value. They are as follows:—

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“The Geologist.” Vols. I.-VII. (1858-1863); “The Geological Magazine, or Monthly Journal of Geology.” 14 vols. (1864-1882); “The Natural History Review.” 12 vols. (1854-1865); “Encyclopædia Britannica.” 9th Edition. Vol. XXIV. (1888); “On the Anatomy of Vertebrates.” By R. Owen, F.R.S. 3 vols.; “Elementary Text-book of Zoology.” By Dr. C. Claus, translated and edited by A. Sedgwick, M.A. 2 vols.; “A Text-book of Physiology.” By M. Foster, M.D., &c. 5th Edition, Part I. 1888; “A Text-book of the Physiological Chemistry of the Animal Body.” By A. Gamgee, M.D., &c. Vol. I.; A Text-book of Pathological Anatomy and Pathogenesis.” By Ernst Ziegler, translated by Donald Macalister, M.D. 2 vols.; “Elements of the Comparative Anatomy of Vertebrates.” By R. Wiedersheim, adapted by W. N. Parker; “A Course of Elementary Practical Physiology.” By M. Foster, M.D., and J. N. Langley, M.A., &c. 5th Edition; “The Elements of Embryology.” By M. Foster, M.D., &c., and the late F. M. Balfour, M.A., &c.; “A Course of Elementary Instruction in Practical Biology.” By T. H. Huxley, LL.D., &c., assisted by H. N. Martin, M.D., &c.; “An Introduction to the Osteology of the Mammalia.” By W. H. Flower, LL.D., &c.; “Micro-Organisms and Disease.” By E. Klein, M.D., &c.; “Anthropology.” By E. B. Tylor, D.C.L., &c.; “A Course of Practical Instruction in Botany.” Parts I. and II. By F. O. Bower, D.Sc., &c.; “Physiography.” By T. H. Huxley, F.R.S.; “Lectures on the Physiology of Plants.” By Julius von Sachs, translated by H. Marshall Ward, M.A.; “Outlines of Classification and Special Morphology of Plants.” By Dr. K. Goebel, translated by H. E. F. Garnsey, M.A.; “Comparative Anatomy of the Vegetable Organs of the Phanerogams and Ferns.” By Dr. A. de Bary, translated by F. O. Bower, M.A., and D. H. Scott, Ph.D., &c.; “The Geological History of Plants.” By Sir. J. William Dawson, C.M.G., LL.D., &c.; “Geology—Chemical, Physical, and Stratigraphical.” By Joseph Prestwich, M.A., &c. 2 vols.; “Three Expeditions into the Interior of Eastern Australia.” By Major T. L. Mitchell, F.G.S., &c. 2 vols.; “Travels of a Naturalist in Japan and Manchuria.” By Arthur Adams,

F.L.S., &c.; "A Course of Lectures on Electricity." By George Forbes, M.A., &c.; "The Story of Creation." By Edward Clodd; "Modern Theories of Chemistry." By Dr. Lothar Meyer, translated by P. Phillips Bedson, D.Sc., &c., and W. C. Williams, B.Sc. The following Journals, Magazines, &c., for 1889 as published: "The Athenaeum;" "Annals and Magazine of Natural History;" "English Mechanic;" "Entomologist;" "Entomologists' Monthly Magazine;" "The Field;" "Geological Magazine;" "The Ibis;" "Journal of Anatomy and Physiology;" "Journal of Botany;" "Nature;" "Proceedings of the Royal Geographical Society;" "Quarterly Journal of Microscopical Science;" "Science Gossip;" "The Zoologist;" "The Scottish Geographical Magazine." "Transactions of the Royal Society of Edinburgh." Vols. VIII., XXI. (Part 4), XXII. (Parts 1 & 3), XXIII., XXIV., XXVI. (Part 4), XXVIII. (Parts 2 & 3), XXIX. (1817-80); "Transactions of the Royal Irish Academy." Vols. I.-X., XVI., XVII., XVIII. (Part 1), XIX., XXI. (Part 1), (1787-1846); "Charter and Statutes;" "Index, 1786-1813;" "Mémoires de la Société de Physique et d'Histoire Naturelle de Genève." Tomes I.-XXII. (1871-73); "Premier Supplément au Tome XII.;" "Table des Mémoires, &c., T. I.-XX.;" "Abhandlungen herausgegeben von der Senckenbergischen Naturforschenden Gesellschaft, Frankfurt a/M." Band I.-XII. (1854-81); "Annales des Sciences Géologiques." T. I.-XX. (Parts 1 and 2) (1869-88); "Annales des Sciences Naturelles—Zoologie." 6^e Série. T. XV., XVI., XIX., XX. (1883-85); "Botanique." 6^e Série. T. XVII.-XX. (1884-85); "Archives de Zoologie Expérimentale et Générale." 2^e Série. Tomes IV. et V. (1886-87); "Zeitschrift für wissenschaftliche Zoologie." XLVII. Band, 3 and 4 Hefts (1888); "Namen und Sachregister über Band XXXI.-XLV." "Notes from the Leyden Museum." Vol. X., No. 4 (1888); "The Geological Magazine." Vols. VIII.-X. (1871-73); New Series (Decade II). Vols. VII. and VIII. (1880-81); "Coloured Figures of English Fungi or Mushrooms." By James Sowerby, F.L.S. 3 Vols. and Supplement (1797-1803); "Curtis's Botanical Magazine." 3rd Series. Vol. XLIV. (1888); "Stettiner Entomologische Zeit-

ung." 49 Jahrg. (1888). "The Transactions of the Royal Irish Academy. Vols. XI.-XV.; XVIII.; XX.-XXVIII.; XXIX. (Parts 1-5), (1810-89); "Journal of Botany," n.s. Vols. VIII., No. 204 (December, 1879); IX.-XI. (1880-82); "Encyclopædia Britannica." 9th Edition, Index; "Nouvelles Archives du Muséum d'Histoire Naturelle, Paris." 2nde. Série. Tome X., Fasc. 2 (1888); "Notes from the Leyden Museum." Vol. XI., No. 1 (1889); "The Origin of Floral Structures through Insect and other Agencies." By the Rev. George Henslow, M.A., F.L.S., &c.; "The Morphology of the Skull." By W. K. Parker, F.R.S., and G. Bettany, M.A., B.Sc.; "Berliner Entomologische Zeitschrift—herausgegeben von dem Entomologischen Verein in Berlin." Band XXXII., Heft 2 (1888); "Stettiner Entomologische Zeitung." 50 Jahrg., Nos. 1-3 (1889). "Reichenbachia.—Orchids Described and Illustrated by E. Sander, &c." Vol. I. (12 parts); II. parts 1-5, [1888-89]; Vol. II., Part 7 (1888); "A History of British Fossil Reptiles." (4 vols). By Richard Owen, K.C.B., F.R.S., &c.; "Challenger Reports—Zoology. Vols. XXIII.-XXV., XXVII., XXVIII., XXIX. and XXX.; "Narrative." Vol. I., Part 1.

The first two parts of the fourteenth volume of our Proceedings have been already published, the third is in print, and the fourth will be issued at an early date.

The following abstract of the work which this volume represents may, I hope, be found of some assistance to the inquirer in following up references to other parts of our Proceedings, as well as to those of the sister scientific societies established elsewhere among the English-speaking communities of the southern hemisphere.

Since the beginning of 1889 we have received copies of the aforesaid Proceedings as follows, viz.:

Royal Society of N.S.W., Vol. XXII., Part 2; Vol. XXIII., Part 1.

Royal Society of Tasmania, volume for 1888.

Royal Society of Victoria—Proceedings, Vol. I. (new series).

Royal Society of S. Australia—Proceedings, Vols. XI. and XII.

Royal Society of Queensland, Vol. V., Parts 4 and 5; Vol. VI., Parts 1-5.

Institute of New Zealand, Vols. XX. and XXI.

Royal Geographical Society of Australasia—

- New South Wales Branch, none.
- Victoria Branch, none.
- Queensland Branch, Vol. III., Part 2; Vol. IV.; Vol. V., Part 1.

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Victorian Naturalist, Vol. V., No. 9, to Vol. VI., No. 8 inclusive.

The contributors to the current volume of our Proceedings are:—

A. SIDNEY OLLIFF, F.E.S.—New species *Phyllodes* described, p. 113; New species Cetoniidæ, described by O. E. JANSON, F.E.S. (communicated), p. 127; On Rhopalocera from Mount Kosciusko, p. 619; *Pielus hyalinatus* and its allies, p. 641; New species of Lampyridæ, p. 643.

Rev. J. E. TENISON-WOODS, F.G.S., F.L.S., &c.—Vegetation of Malaysia, p. 9.

J. H. MAIDEN, F.L.S., F.C.S.—Geographical distribution of some N.S.W. plants, compiled from information given by Baron v. Mueller and Mr. W. Bauerlen, p. 107; On *Eucalyptus* Kinos—Part i. The Ruby Group, p. 605; Part ii. The Gummy Group, p. 1277; On Spinifex Resin, p. 629; On the Gum from *Cedrela australis*, p. 1047; On the Pharmacology of some Australian Plants by T. L. Bancroft, M.D. (communicated), p. 1061.

F. A. A. SKUSE.—On the genus *Lestophonus*, with description of a new species, p. 123; Genus *Batrachomyia*, Macleay, MS., 2

species described, p. 171 ; Diptera of Australia. Part vi.—The Chironomidæ, p. 215. Part vii.—The Tipulidæ brevipalpi, p. 757.

Rev. T. BLACKBURN, B.A., Corr. Mem.—Revision of the Genus *Heteronyx*. Part ii., p. 137. Part iii., p. 425. Part iv., p. 661. Supplement, p. 1217 ; Notes on Australian Coleoptera. Part iii., p. 445. Part iv., p. 707. Part v., p. 1247.

J. DOUGLAS OGILBY, F.L.S.—Australian Palæichthyes. Part ii., p. 178 ; *Hoplocephalus frontalis*, n.sp., described, p. 1027 ; *Lygosoma*, n.sp., and *Ablepharus*, n.sp., described, p. 1296.

J. C. COX, M.D., F.L.S.—On *Cypræa venusta*, Sow., p. 187 ; *Ancylus Smithi*, n.sp., and *Cypræa Irvineanæ*, n.sp., described, p. 658.

BARON VON MUELLER, K.C.M.G., &c., &c.—On the probable occurrence of *Aldrovanda vesiculosa* in N.S.W., p. 197 ; On *Eucalyptus Maideni*, n.sp., from N.S.W., p. 1020.

R. ETHERIDGE, JUNR.—On the Permo-carboniferous Fossils from N.W. Australia in the Macleay Museum, p. 199 ; Fructification of *Phleopteris alethopteroides*, Lower Mesozoic of Queensland, p. 625 ; On the Biology of Lord Howe Island, p. 627 ; On the structure of *Conularia inornata*, and of *Hyolithes lanceolatus* with its operculum, p. 751.

Rev. Dr. WOOLLS, F.L.S.—On a collection of Plants obtained at King George's Sound by the Rev. R. COLLIE, F.L.S., p. 317.

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W. J. STEPHENS, M.A., F.G.S.—An attempt to synchronise the Australian, South African, and Indian Coal Measures. Part 1, Australia and New Zealand, p. 331.

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T. W. EDGEWORTH DAVID, B.A., F.G.S.—On the Origin of Kerosene Shale, p. 483.

T. G. SLOANE.—Review of the genus *Sarticus* (Carabidæ), p. 1288; Studies in Australian Entomology, No. ii. p. 1288.

T. P. LUCAS, M.R.C.S.—New species of *Iodis* described, with remarks on *Pielus imperialis*, Olliff, p. 603; On Queensland Macro-lepidoptera, localities and new species, p. 1065.

J. BRAZIER, F.L.S.—On Mollusca trawled off Merimbula, p. 747.

W. J. MCKAY, B.Sc.—Osteology and Myology of *Acanthophis antarctica*, p. 893.

A. J. NORTH, F.L.S.—On birds collected by Mr. E. H. SAUNDERS, near Roeburne, N. W. Australia, p. 1023; On the nidification of two Australian species of Birds, p. 1050; Of two species from Lord Howe Island, p. 1296; On *Sternula sinensis* breeding in N.S.W., p. 1296.

C. W. DE VIS, M.A., Corr. Mem.—*Tropidophorus Queenslandiae*, (Scincidæ), n.sp., and *Perochirus Mestoni* (Geckonidæ), n.sp., description, p. 1034.

W. H. MISKIN, F.E.S.—Revision of the Australian species of *Euploea*, with 7 new species described, p. 1037.

K. H. BENNETT, F.L.S.—On the breeding of *Ibis falcinellus*, p. 1059.

E. MEYRICK, B.A., F.E.S.—Description of additional Australian Pyralidina, p. 1105; Revision of Australian Lepidoptera. Part iii., p. 1117.

E. P. RAMSAY, L.L.D., F.L.S., and J. D. OGILBY, F.L.S.—*Lygosoma*, n.sp., description, p. 1296.

I have classified the more important papers in the Australian Scientific Serials as follows, referring under each head to the

authors of papers on similar subjects in the Linnean Society as enumerated above, and touching also on points of particular interest to Australian Students of Science which have been treated of elsewhere.

VERTEBRATES.

ANTHROPOLOGY.

Royal Society, N.S.W.—VOL. XXIII. : Aborigines of Australia. W. T. Wyndham.

New Zealand Institute.—VOL. XXI. : Col. Maedonnell on the Ancient Moa Hunters at Waingongoro. Communicated by James Park.

A Residence among the Natives of Australia. By K. Lumboldt. Bull. Am. Geog. Soc. XXI. 1 ; and Among Cannibals, an Account of Four Years' Travels in Australia and of Camp Life with the Aboriginals of Queensland. By the same author. London, J. Murray ; Melbourne and Sydney, A. Petherick and Co.

MAMMALS.

Royal Society, South Australia.—VOL. XI. : On a new Australian Mammal. E. C. Stirling. See also Nature, XXXVII. p. 588 ; The Zoologist (3), XII. p. 424 ; Zool. Anz. XI. p. 647, &c.

New Zealand Institute.—VOL. XX. : On New Zealand Rats. A. Reischek, F. W. Hutton.

There is a note on the Nomenclature of the Short-eared New Zealand Bat (*Chalinolobus morio*, for *C. tuberculata*). Oldfield Thomas. Ann. and Mag. N.H. IV. 462.

The question as to the exact relations of the fossil Multi-tuberculata (Fossil Marsupials—so called) to existing forms is discussed by H. F. Osborn (as quoted in last year's Address). Ac. Nat. Sc. Philadelph. p. 88. Upon this subject Prof. Cope (Amer. Naturalist, XXII. pp. 259, 723), referring to Mr. Poulton's observations upon the rudimentary and evanescent

teeth of *Ornithorhynchus*, concludes that it is probable that the said Multituberculata are allied more nearly to the Monotremes than to the Marsupials,

The Foetal Membranes of Marsupials are treated by Mr. Osborn in the Journal of Morphology, I. p. 2.

BIRDS.

Linnean Society, N.S.W.—Cox and Hamilton, North, Bennett.

Royal Society, Tasmania.—*Anseranas melanoleuca* in Tasmania. W. F. Petterd; *Chibea bracteata* in Tasmania. Col. Legge.

Royal Society, Queensland.—VOL. V. Australian Ancestry of the Crowned Pigeon of New Guinea; *Colluricincla sibila*, new species, description. VOL. VI.: *Geosichla cuneata*, new species; *Sericornis gutturalis*, new species, description; On *Prionodura Newtoniana*; *Acanthiza squamata*, new species; *Pachycephala ferox*, new species, description. C. W. De Vis.

New Zealand Institute.—VOL. XX.: Ornithological Notes; *Lobivanellus personatus* in New Zealand. T. W. Kirk. VOL. XXI.: On some Birds from the Kermadec Islands; On *Diomedea cauta*. T. F. Cheeseman; On *Diomedea exulans*. A. Reischek; On *Sula fusca*. A. Hamilton; On *Athene Novae Zealandiae*. W. Colenso; Birds of Lake Brunner district. W. W. Smith; On *Apteryx Bulleri*, new species. R. Bowdler Sharpe; On *Notornis Mantelli* in West Otago. James Park; On some New Zealand Birds. T. W. Kirk.

Victorian Naturalist V.—Oology of Australian Birds, Supplement, Part 5. A. J. Campbell.

REPTILES AND AMPHIBIA.

Linnean Society, N.S.W.—J. Douglas Ogilby, J. J. Fletcher, W. J. McKay, C. W. De Vis, E. P. Ramsay.

Royal Society, Queensland.—VOL. V.: *Miculia orientalis*, new species, description. VOL. VI.: *Neospades*, a new genus of Natricidae. C. W. De Vis.

Australasian Association for the Advancement of Science, Section D.—On the Pineal Eye in *Hinulia* and *Grammatophora*. W. J. McKay ; On a *Myxosporidium* infesting Australian Frogs. A. W. Fletcher.

The position of *Meiolania* is discussed by Baur and Boulenger in Ann. Nat. Hist. (6) III. pp. 54, 138 ; IV. p. 37.

R. Lydekker in Ann. and Mag. N.H. (6) IV. p. 475, remarks that fossil skulls of a small Labyrinthodont from the Karoo formation, S. Africa, agree so closely with *Bothriceps*, Huxley, *presumably from the Hawkesbury beds of Australia* that they may be regarded as indicating a new species of that genus, for which he proposes the name *B. Huxleyi* ; and that this instance is paralleled by the occurrence of *Cleithrolepis* in both deposits. See Q.J.G.S. XLIV. p. 141.

FISHES.

Linnean Society, N.S.W.—J. D. Ogilby.

Royal Society, Tasmania (1888).—Concise History of the Acclimatisation of the *Salmonidae* in Tasmania. P. S. Seager ; Results of attempts to acclimatise *Salmo salar* in Tasmania. R. M. Johnston.

New Zealand Institute.—VOL. XX. : On a specimen of *Regalecus*. T. Jeffrey Parker ; Fishes of Mokohinou Islands. F. S. Sandager.

MISCELLANEOUS.

Royal Society, Queensland.—VOL. VI. : Observations on a Natural History Collection made on the cruise of H.M.S. "Myrmidon" at Port Darwin and Cambridge Gulf (1888), with descriptions of new species of fishes and birds. W. Saville Kent.

Australasian Association for the Advancement of Science, Section D.—On the Nomenclature of the Sexual Organs in Plants and Animals. T. Jeffrey Parker.

MOLLUSCA.

Linnean Society, N.S.W.—J. C. Cox, J. Brazier.

Royal Society, N.S.W.—VOL. XXII.: On the Anatomy and Life-history of Mollusca peculiar to Australia. J. E. Tenison-Woods.

Royal Society, Tasmania.—Contributions for a systematic Catalogue of the Aquatic Shells of Tasmania. W. F. Petterd; Critical observations on the above; Variability of the Tasmanian *Unio*. R. M. Johnston.

Royal Society, South Australia.—VOL. XI.: Lamellibranch and Palliobranch Mollusca of South Australia; Census of the Molluscan Fauna of Australia; Gastropods of the Older Tertiary of Australia. R. Tate.

Royal Society, Queensland.—VOL. V.: Errata in list of Land Shells recorded from Queensland. H. Tryon; *Limax Queenslandicus*, n.sp., described; On *Aneitea Graeffei* and its allies, C. Hedley. VOL. VI.: Anatomical Notes on Helicidæ. Parts 1-3.; Notes on Queensland Land Shells. C. Hedley.

New Zealand Institute. —XX.: On *Architeuthis longimanus*, n.sp. T. W. Kirk; On *Paryphanta lignaria*, n.sp. F. W. Hutton.

Victorian Naturalist.—V.: On *Voluta undulata* and its allied species. R. Tate.

Australian Association for the Advancement of Science, Section D.—On some new or little known genera of Australian Mollusca. R. Tate.

The Rev. A. H. Cooke (P.Z.S. 1889, p. 136) discusses the generic position of the *Physæ* (so called) of Australia, concluding that they are in reality sinistral Limnæidæ, characteristic of the lands of the S.E. Pacific, Africa and the Mediterranean.

ARTHROPODA.

INSECTS, SPIDERS, &c.

Linnean Society, N.S.W.—A. Sidney Olliff, F. A. A. Skuse, T. Blackburn, T. G. Sloane, T. P. Lucas, W. H. Miskin, E. Meyrick.

Royal Society, South Australia.—VOL. XI.: New South Australian Coccidæ. W. M. Maskell; New species Australian Coleoptera. T. Blackburn. VOL. XII.: *Hectoria Pontoni*, n.gen., n.sp.; On Pores in Veins of some Diptera. F. S. Crawford; Further notes on Australian Coleoptera, T. Blackburn.

Royal Society, Queensland.—VOL. VI.: New species Queensland Butterflies; New species Rhopalocera, description. T. P. Lucas; New species Australian Hesperiidæ, description; Revision of the Australian species of the Lepidopterous genus *Terias*, with description, new species; Notes on some undescribed Australian Rhopalocera. W. H. Miskin.

New Zealand Institute.—VOL. XX.: *Coccinella Novæ Zealandiæ*. W. Colenso; Supplement to Monograph on Noctuina of New Zealand; On New Zealand Geometrina; On New Zealand Pyralidina; On New Zealand Tortricina; On New Zealand Tineina. E. Meyrick; On *Henops brunneus*. W. M. Maskell; On new species of Araneidea. A. T. Urquhart; New species New Zealand Araneæ, description; Note on *Amaurobioides maritima*. P. Goyen. VOL. XXI.: On *Gryllotalpa vulgaris* in New Zealand. T. W. Kirk; On Gall-producing Insects in New Zealand. W. Maskell; On new species Araneidea; On new species *Gasteracantha*. A. T. Urquhart; New Zealand Micro-lepidoptera, new species, description. E. Meyrick; Natural History of three species of Micro-lepidoptera; Varieties of *Declana floccosa*. G. V. Hudson; *Hemideina nitens*, new species Locustidæ; On a peculiar Chrysalis; On *Pyrameis gonerilla*. W. Colenso.

Victorian Naturalist.—V.: On *Peripatus* in Victoria. A. Dendy. See also Nature XXXIX. pp. 366, 412; and *Peripatus*, Two monographs by A. Sedgwick, F.R.S. (Studies from the Morphological Laboratory in the University of Cambridge.)

The maturation of the Ovum in the Cape and New Zealand species of *Peripatus* is the subject of a paper by Lilian Sheldon Q.J.M.S. XXX. p. 1 (with 3 plates).

The Rev. O. P. Cambridge describes a very singular new genus of spider, *Chasmoccephalon* (*C. neglectum*), from Swan River. P.Z.S. 1889, p. 45.

CRUSTACEANS.

New Zealand Institute.—VOL. XX. : On *Anthosoma Smithii*. T. W. Kirk ; VOL. XXI. : Distribution of the Freshwater Crayfish of New Zealand. Charles Chilton ; Notes on New Zealand Crustacean Fauna. G. M. Thomson.

LOWER METAZOA.

ANNELIDES.

Linnean Society, N.S.W.—J. J. Fletcher.

Transactions of the Royal Society of Victoria.—VOL. 1. Part 1: The Anatomy of *Megascolides australis*. W. Baldwin Spencer.

Royal Society, Queensland.—VOL. VI. : On Filariae of Birds. T. L. Bancroft.

The Australian Oligochaetæ *Cryptodrilus purpureus*, n.sp., *Acanthodrilus australis*, n.sp., are described by W. Michaelsen (Mtthg. N.H. Mus. Hamburg, VI.).

POLYZOA.

A. W. Waters describes Bryozoa from N.S.W. (Ann. and Mag. N.H. (6) IV., p. 1).

The Anatomy of *Phoronis australis*, W. B. Benham (Q.J.M.S., n.s., XXX. 2, p. 125).

ROTIFERA.

Royal Society, Queensland.—VOL. VI. : List of Queensland Rotifera. V. Gunson Thorpe.

CŒLENTERATES AND SPONGES.

Royal Society, Victoria.—VOL. 1 n.s.: Actinian Larva parasitic upon a Medusa; List of Sponges, described by H. J. Carter, with notes; Structure and development of *Stelospongus flabelliformis*. A. Dendy.

Victorian Naturalist.—VOL. V.: List of Australian Hydroida. W. M. Bale.

PROTOZOA.

On the Freshwater Infusoria of the Wellington District. W. M. Maskell, Trans. N.Z. Inst. XX.

MISCELLANEOUS.

A Comparative Study of Striated Muscle, by Prof. Haswell (Q.J.M.S., n.s., XXX. 2, p. 31).

BOTANY.

Linnean Society, N.S.W.—J. E. Tenison Woods, J. H. Maiden, F. v. Mueller, W. Woolls, O. Katz (*Microbes*).

Royal Society, N.S.W.—VOL. XXII.: Phytographic expressions and arrangements. F. v. Mueller; Indigenous Australian Forage Plants, other than Grasses, including plants injurious to stock; Some N.S.W. Tan Substances, Part V. J. H. Maiden.

Royal Society, South Australia.—VOL. XI.: Additions to Flora of Port Lincoln district; Plants of Lake Eyre Basin. R. Tate; Fungi collected near Lake Bonney. M. C. Cooke. VOL. XII.: Revision of the Flora of Kangaroo Island; Census of the Indigenous Flowering Plants of Extra-tropical South Australia; Four new species Australian Plants described. R. Tate; Geographical distribution of Australian Characeæ. F. v. Mueller; Notes on Australian Fungi. J. G. O. Tepper; Gums, and a Resin produced by Australian Proteaceæ. J. H. Maiden.

Royal Society, Queensland.—VOL. V.: Queensland form of *Nipa fruticans*; On *Acacia melaleuroides*. F. M. Bailey; Bryological Notes. C. J. Wild. VOL. VI.: The Lichen Flora of Queensland, Part II.; Addition to the same; The same,

Part III. J. Shirley; Notes on Lichens in N.S.W. F. R. M. Wilson.

Institute, New Zealand.—VOL. XX.: Notes on the Three Kings Islands; On the Flora of the Kermadec Islands. T. F. Cheeseman; Naturalised Dodders and Broom-rapes of New Zealand. T. W. Kirk; New species New Zealand Phænogams, Ferns, Cryptogams, described. W. Colenso, D. Petrie, J. Buchanan. VOL. XXI.: On the Desmidieæ of New Zealand. W. M. Maskell; Botany of Te Moehau Mountain, Cape Colville. James Adams; *Orobanche hydrocotylei*, supposed new species; New species of Cryptogamic Plants; Of Phænogams. W. Colenso; On the movements of the pistil in *Glossostigma elatinoides*. Clement W. Lee.

Victorian Naturalist.—VOL. VI.: Australian Loganiaceæ; New species of *Drakæa*, *Prasophyllum*, *Gompholobium*, *Oldenlandia*, *Eulophia*, *Chorilæna*, *Logania*, *Chloanthes*, described. F. v. Mueller; Forty-one new species Australian Lichens described. F. R. M. Wilson.

Australasian Association for the Advancement of Science, Section D.—On the action of Metallic Salts in the development of *Aspergillus nigrescens*. W. M. Hamlet; On respiration in the roots of Shore Plants. J. Bancroft.

The Forest Flora of New Zealand. By T. Kirk, F.G.S., &c., is spoken of as a magnificent work on the trees and shrubs of that isolated region.

GEOLOGY AND PHYSIOGRAPHY.

Linnean Society, N.S.W.—R. Etheridge, junr., W. J. Stephens, T. W. E. David, as above.

Royal Society, N.S.W.—VOL. XXII.: Census of the Fauna of the Older Tertiary of Australia. R. Tate; The Desert Sandstone. J. E. T. Woods. VOL. XXIII.: Source of the Underground Water in the Western Districts. H. C. Russell; Eruptive Rocks of New Zealand. F. W. Hutton.

Royal Society, Victoria.—VOL. I.: Maintenance of Energy (On Volcanic Action, S.). R. Abbott; On two new Fossil Sponges from Sandhurst. T. S. Hall; The Active Volcano in Tana, New Hebrides. F. A. Campbell; Physiography of Western portion of Croajingolong. J. Stirling.

Royal Society, South Australia.—VOL. XI.: Surface features and rocks of Nuriootpa. J. G. O. Tepper; On the Muddy Creek Beds, Victoria. J. Dennant; Coal detritus in the Valley of the Murray. W. Howchin. VOL. XII.: The Foraminifera of the Older Tertiary of Australia.—No. 1. Muddy Creek, Victoria. W. Howchin; Geological and Physical Features of Central Australia. J. J. East.

Royal Society, Queensland.—VOL. V.: On *Synaptodon arvorum*, n.g., n.sp., an extinct Macropod; On *Megalania* and its allies; On the Phalangistidae of the Post-Tertiary Period in Queensland; On *Uroaetus brachialis*, an extinct Eagle. C. W. De Vis.

New Zealand Institute.—VOL. XX.: On Sections in the Weka Pass; The Greensands of the Waihao Forks; On Fossils from the Cobden Limestone, Greymouth; Ancient Rhyolites from Mataura described; On a Leucophyre from the Selwyn Gorge. F. W. Hutton; On the Oxford Chalk Deposit, Canterbury, N.Z. H. Wilson; On the Tarawera Eruption. J. Hardcastle; The Artesian Well System of Hawke's Bay; Geographical Distribution of Pumice in N.Z. H. Hill; On the Volcanic Rocks of the Taupo District; On the Rocks of the Kermadec Islands. A. P. W. Thomas; On the King Country. Laurence Cussen; Geological Notes on the Kermadec Group. S. Percy Smith. VOL. XXI.; The Fall of the Leaf (from the Geological standpoint). J. Rutland; The Amuri Earthquake. F. W. Hutton; Diatomaceous Earth near Oamaru. Harry A. de Lautour; On a Deposit of Moa Bones. A. Hamilton; On Fossil Moa Feathers; On the Oil Prospects at Poverty Bay. H. Hill; On N.Z. Coal. James Park; The Alluvial Deposits of Otago. L. O. Beal; Geology of Tongariro. A. P. W. Thomas; On the Islands S. of N.Z. A. Reischek; On the Waikato R. Basins. L. Cussen.

Victorian Naturalist.—VOL. V. : Geology of Arnhem's Land, Pts. I. II. J. E. T. Woods.

Australasian Association for the Advancement of Science, Section C.—On some salient points in the Geology of Queensland, Address by the President of the section, R. L. Jack ; On the Metamorphic Rocks of the Omeo district, Victoria. A. Howitt ; Age of the Mesozoic Rocks of the Lake Eyre Basin ; Glacial Phenomena in S. Australia. R. Tate ; Origin of the Laterite in the New England district ; Cupriferous Tufts of the Passage Beds between the Permo-carboniferous and the Triassic beds in N.S.W. T. W. Edgeworth David ; The Mesozoic Plains of S. Australia. H. Y. Lyell Brown ; The Rocks of the Hauraki Goldfields. F. W. Hutton ; Geological Sequence of the Bowning Beds. J. Mitchell ; On boulders met with in the beds and reefs of the Gympie Goldfield. W. H. Rands ; On the discovery of Fossils at Rockhampton. J. Smith ; How can Australian Geologists safely rely upon the order of the Succession, &c. R. M. Johnston. *Ibid.*, Section D.—On the Influence of Physiographic changes in the Distribution of Life in Australia, Address by the President of the Section, R. Tate.

The Department of Mines, Sydney, has published the two first parts of Vol. I. of Records of the Geological Survey of N.S.W., containing—(1) Notes on the Geology of the Barrier Range, Mt. Browne, &c., by C. S. Wilkinson ; (2) two papers on Aboriginal remains, by T. W. Edgeworth David and R. Etheridge ; (3) On a *Lonsdaleia*-like Coral ; on *Dromornis* ; on *Cycadopteris scolopendrina* Ratte, by R. Etheridge ; (4) on a species of *Lepidodendron* from Goonoo Goonoo, by R. Kidston ; (5) on the Ossiferous clays of Myall Creek ; on the Fish and Plant beds of the Talbragar River, by W. Anderson, with other Petrological and Mineralogical papers. There appears a sharp discussion on the genera *Nototherium* and *Zygomaturus* in reply to Mr. Lydekker by C. W. De Vis, with note by the former, in Ann. and Mag. N.H. (6) IV., p. 257. I find also a paper on *Atherstonia*, n.g. *Palaeoniscida*, from the Karoo formation ; and on a tooth of *Ceratodus*

from the Stormberg beds, by A. S. Woodward (Ann. and Mag. N.H. (6) IV. p. 239).

In conclusion, Gentlemen, you will all remember the occasion when the hall in which we are now assembled was opened and presented to the Society with the unostentatious munificence characteristic of Sir WILLIAM MACLEAY. You will also remember with what hearty and unanimous assent it was resolved to record our grateful appreciation of his action by a permanent token, in the form of a portrait executed in marble and erected here in a conspicuous place of honour.

This resolution was arrived at on October 31, 1885 ; but owing to unavoidable delay it was long before the committee appointed to carry it into effect, Dr. Cox and Mr. MACMAHON, were able to complete their arrangements. At last however, on June 22, 1889, the excellent bust of Sir WILLIAM MACLEAY, which you see before you, the design and handwork of Signor SIMONETTI, of Sydney, was formally unveiled. On that occasion I had the honour of giving some expression, though in inadequate terms, to the feelings with which this Society rightly regards their eminent benefactor, and of reminding you, by a brief summary of facts, of some of his principal services ; and I think you will consider it not an improper use of the present opportunity if I now proceed to repeat, from a report in the *Sydney Morning Herald*, a small portion of what I had then to say upon the last head :—

“ I can only enumerate a portion of the many and great benefactions by which Sir WILLIAM MACLEAY has fully earned and fully gained the sincere and deep gratitude which we have met to testify by an enduring token. But I must remind you at least of his having borne all the expenses of our unfortunately brief establishment in the Garden Palace, of his gift of one admirable library of Natural History, which was to be consumed in the subsequent conflagration, only to be replaced by the still more costly, extensive, and, I may almost say, invaluable collec-

tion which you see upon the shelves around you, and which he is still from day to day expanding and enlarging in all directions. I must also remind you that he has from the time of that fire never ceased to entertain the Society in a home found for it by his own hospitality—first in an office, then in a commodious dwelling-house, and finally in this spacious hall, presented to the Society on the occasion to which I have already referred.

“Sir WILLIAM MACLEAY has borne the greater part of the expenses of the Society’s publications, has supplied the salaries of its officers, furnished its specialists with abundant funds for their investigations and their maintenance, and has equipped this establishment with its fittings, furniture and apparatus for research. He has moreover obtained for us the Charter under which the Society reckons upon permanence, perhaps for centuries to come. In the gift to the University of his magnificent collection for natural history, special provision is made that the Macleay Museum shall be available for all purposes of study and research to members of this Society on equal terms with the members of the University. Moreover in the noble foundation which he is establishing for the support or assistance of real investigation and original workers in Science, he has once more shown how completely he has identified himself with this Society by throwing upon the Council the whole and sole responsibility of selecting among duly qualified candidates for his Linnean Fellowships, those who shall show and give promise of the greatest aptitude and industry for their several and special line of research. He has arranged to bequeath—may it be long before the bequest fall due!—the sum of £35,000 for the establishment of four “Linnean Fellowships” of the annual value of £400 each, tenable for one year only at a time, but open to renewal year after year upon satisfactory proof being given to the Council that the holder has laboured during the preceding term with earnestness, perseverance, and success.

“Whether the distinction which has been recently conferred by the Crown on our member is in any way due to the work which he has carried on in this Society, I can only conjecture; and there

are so many grounds upon which the Crown might have been well advised to grace him with this honour, that I feel some hesitation in forming that conjecture. But in any case we congratulate ourselves also when we congratulate a fellow member upon his well earned dignities."

Now gentlemen,—I have no doubt that our friend Sir WILLIAM MACLEAY would have preferred that these remarks should not have been repeated here to-day, even though their expression might have been on the first occasion unavoidable. But I regard it as no unimportant part of my duty as President, to take care that not only all the members of our own Society, but also those of kindred associations in Australia and elsewhere should be made acquainted in some degree with the kind of assistance and the extent of support which Natural Science has in this country received from his unstinted liberality. In such a case, silence would betoken ingratitude. And in the second place I cannot but consider that the whole Australian people is very much interested in such examples as this of the life of Sir WILLIAM MACLEAY, displaying as it does both the energy and perseverance requisite for the honourable acquisition of wealth, and the rarer qualities of understanding how that wealth may best be applied to advance the public intelligence and welfare, and of perfect generosity in devoting it to that service.

FLOREAT SOCIETAS LINNEANA !

On the motion of Mr. Trebeck, a vote of thanks was accorded to the President for his interesting address. Mr. Trebeck also gave expression to the feelings of honour and esteem in which Sir W. Macleay is held by the members of the Society.